IN THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph beginning at page 8, line 24 through page 9, line 1 with the following rewritten paragraph.

Fig. 12 is a sectional view of the connector device according to a fourth embodiment of the present invention ~~and its partially enlarged view~~.

Please replace the paragraph beginning at page 9, line 20 through page 10, line 8 with the following rewritten paragraph.

As an example of an ~~embodiments~~ embodiment of the present invention, as the pressurized gas of the present invention, for example pressurized carbon dioxide gas (hereinafter referred to as "pressurized carbon dioxide gas") used as the refrigerant of a cooling device is illustrated. The leakage of the pressurized carbon dioxide gas from a connected portion of two connecting hollow members for connecting two pipes is illustrated as an illustration of the part where the pressurized gas is leaked. Further, the pressurized carbon dioxide gas used as the refrigerant of the cooling device is sometimes heated to about for example 40

to 80°C. This will be referred to as the "pressurized and heated carbon dioxide gas. Naturally, the present invention is not limited to such an illustration.

Please replace the paragraph beginning at page 12, line 25 through page 13, line 10, with the following rewritten paragraph.

The inside diameter of the second hollow part 72 is formed to a size enabling the pressurized carbon dioxide gas to pass while maintaining a strength of the main body 70. In the same way, the inside diameter of the fifth hollow part 93 is formed to a size enabling the pressurized carbon dioxide gas to pass while maintaining a strength of the shaft 19. The inside diameter of the second hollow part 72 and the inside diameter of the fifth hollow part 93 are the same or the inside diameter of the ~~third~~ second hollow part ~~73~~ 72 is slightly larger than the inside diameter of the fifth hollow part 93.

Please replace the paragraph beginning at page 14, lines 12 through 17, with the following rewritten paragraph.

When connecting the first connection member 7 connected to the pipe 3 and the second connection member 9 connected to the pipe 5, the shaft 19 is inserted

into the third hollow part ~~93~~ 73, then the connection member 7 and the connection member 9 are strongly connected with each other by fastening them by for example not illustrated bolts.

Please replace the paragraph beginning at page 15, line 23 through page 16, line 7, with the following rewritten paragraph.

As shown enlarged in FIG. 2, the shaft 19 has a groove 19G. The groove 19G is defined by a flat bottom 19B, an inclined surface (tapered surface) 19T, and walls 19W1 and 19W2 on the two ~~side~~ sides of the flat bottom 19B and the tapered surface 19T. The groove 19G having such a cross-section is formed annularly in a circumferential direction perpendicular to the axial direction of the shaft 19. The groove 19G having the tapered surface 19T corresponds to an embodiment of a clearance narrowing means in the present invention.

Please replace the paragraph beginning at page 18, lines 1 through 5, with the following rewritten paragraph.

FIG. 3A is a sectional view of the backup ring 13 taken along a line A-A in FIG. ~~3A~~ 3B, and FIG. 3B and FIG. 3C are front views of the first and second types

of the backup ring 13 when viewed from the first wall 19W2 toward the second wall 19W1.

Please replace the paragraph beginning at page 18, lines 15 through 17, with the following rewritten paragraph.

The backup ring 13 desirably has a complete ring-like shape circling the groove 19G once from the viewpoint of preventing leakage of the pressurized carbon dioxide gas.

Please replace the paragraphs beginning at page 21, lines 3 through 21, with the following rewritten paragraphs.

Such a backup ring 13 is formed for example by a polyacrylonitrile resin, polyvinyl alcohol resin, polyamide resin, polyvinylfluoride resin, high density polyethylene resin, polystyrene resin, ~~PEEK~~ polyetheretherketon (PEEK) resin, ~~PPS~~ polyphenylenesulfide (PPS) resin, ~~LCP~~ Liquid Crystal Plastic (LCP) resin, polyimide resin, or other resin material. These resin materials have the property that almost no carbon dioxide gas permeates through them. Further, the backup

ring 13 may be formed by 46Nylon or other synthetic polymer material resistant to passage of a gas.

Before connecting the pipe 3 and the pipe 5, for example the backup ring 13 illustrated in FIG. 3C is ~~it~~ fit on the tapered surface 19T part in the groove 19G from the front end of the shaft 19, the O-ring 11 is mounted (fit) on the flat bottom 19B part, then the shaft 19 is inserted into the hollow part 73 of the housing 17 to make the front end surface of the housing 17 and the end surface of the main body 90 abut against each other, and the connection member 7 and the connection member 9 are connected by using for example not illustrated bolts.

Please replace the paragraphs beginning at page 29, line 3 through page 30, line 17, with the following rewritten paragraphs.

In FIG. 5A, a first half groove 19G1 formed in a shaft 19a has a flat bottom 19B, a tapered surface 19T, and walls 19W11 and 19W21. The bottom 19B and the tapered surface 19T are the same as those in the groove 19G illustrated in FIG. 2, but the heights of the walls 19W11 and 19W21 are lower than those of the walls 19W1 and 19W2 illustrated in FIG. 2 by for example about a half. Namely, the depth of the first half groove 19G1 is shallower than the depth of the groove 19G by for example about a half. On the other hand, a second half groove 17G1 is

formed in the inner wall of the housing 17a. The second half groove 17G1 is constituted by a wall 17W having about the same height as that of the wall 19W21 and a bottom 17B. When the shaft 19a is inserted into the third hollow part 73 of the housing 17a, the positions of the first half groove ~~G19G1~~ 19G1 and the second half groove 17G1 in the axial direction coincide as illustrated in FIG. 5A and substantially the same groove as the groove 19G illustrated in FIG. 2 is defined. The first half groove 19G1 of the shaft 19a is fit with the backup ring 13 and the O-ring 11 in advance.

In FIG. 5B, a second half groove 17G2 is formed on the inner wall of the housing 17b. The second half groove 17G2 is constituted by a wall ~~17T~~ 17W1 having about the same depth (height) as that of the wall 19W21 of FIG. 5B, a tapered surface 17T the same as the tapered surface 19T, and a bottom 17B. The groove 19G1 formed in the shaft 19b is the same as that of FIG. 5A. When the shaft 19b is inserted into the third hollow part 73 of the housing ~~17B~~ 17b, the positions of the first half groove 19G1 and the second half groove 17G2 in the axial direction coincide as illustrated in FIG. 5B and substantially the same groove as the groove 19G illustrated in FIG. 2 is defined. On the first half groove 19G1 of the shaft 19b, the backup ring ~~13~~ 13A, and the O-ring 11 are previously mounted. Note that, in the second half groove 17G2 illustrated in FIG. 5B, the tapered surface 17T is formed, therefore the circumferential edge portion contacting the

tapered surface 17T of the backup ring 13 is not the flat surface as illustrated in FIGS. 2 and FIG. ~~3A~~ 5A and is inclined in the same way as the surface contacting the tapered surface 19T.

Please replace the paragraph beginning at page 35, lines 8 through 16, with the following rewritten paragraph.

It is seen from the above description that, in order to reduce the amount of gas permeation, it is not effective to narrow the gas entry area through which the gas enters the seal member made of rubber (butyl rubber sheet 35), but it is effective to narrow the outlet of the gas for discharging the gas permeated through the inside of the seal member by the aluminum sheet 37. Namely, as shown in FIG. 6C, the aluminum sheet 37 at the outlet of the butyl rubber sheet ~~36~~ 35 narrows the gas permeation area.

Please replace the paragraph beginning at page 45, line 17 through page 46, line 1, with the following rewritten paragraph.

The O-ring 11 by itself maintains the insides and the outsides of the connector device 1 in the sealed state in a low pressure state of the inside of the

connector device 1 equivalent to the atmospheric (ambient) pressure since the pressurized gas does not pass through the first pipe 3 and the second pipe 5, while ~~prevents~~ preventing the leakage of the pressurized gas to a certain extent when the pressurized gas passes through the first pipe 3 and the second pipe 5 and the insides of the connector device 1 become a high pressure state.

Please replace the paragraph beginning at page 49, lines 8 through 13, with the following rewritten paragraph.

The tapered surface 57T, in the same way as the tapered surface 19T in the case of the first embodiment, is formed continuing from a flat bottom 57B of the groove 57G as defined by the flat bottom 57B, the tapered surface 57T and walls 53W1 and 53W2 and so that the groove becomes shallower toward the low pressure LS side of the outside of the connection member 47 and the connection member 49.

Please replace the paragraph beginning at page 56, line 19 through page 57, line 2, with the following rewritten paragraph.

The seal member 151 has the same diameter as ~~a second hollow part 1572~~ the connection member 157 and the fourth hollow part 492~~,~~ communicates with the second hollow part 1572, and the ~~fourth hollow part 492, and~~ said member 151 is formed ~~to~~ in a thin sheet shape having an opening 151a for flow of the carbon dioxide gas. It is comprised by a plastic sheet or a metal gasket coated thinly with rubber on both surfaces. The surfaces on the two sides of the sheet-shaped seal member 151 become the sealing surfaces.

Please replace the paragraph beginning at page 60, line 23 through page 61, line 1, with the following rewritten paragraph.

When combining the first embodiment and the ~~fourth~~ second embodiment in this way, the synergistic effect causes the leakage of the pressurized carbon dioxide gas to become very small.

Please replace the paragraphs beginning at page 62, lines 2 through 19, with the following rewritten paragraphs.

Further, in the third embodiment with reference to Figs. 1D and 11, it is also possible if the sectional shape of the O-ring ~~351~~ 11 be made triangular matching

with the triangular sectional shape of the groove 120. Also, the shape of the groove 120 is not limited to a triangular sectional shape and may be any shape by which the gas permeation area on the low pressure side of the seal member becomes small. The fact of the shape of the groove being changeable is the same for the case of the connector device 200 shown in FIG. 13.

In the first and second embodiments, when using the backup ring 13e having the crush margin 13D as shown in FIGS. 8A and 8B, it becomes possible to obtain a higher seal property than that of the mode of using another seal member such as connector device 200 and connector device 250 together. By this, it is possible to eliminate the trouble of formation of the groove 120 and fitting of the seal member 251 and prevent complication of the structures of the seal device and connector device.